Filing Date: December 28, 2000

Title: METHOD AND DEVICE FOR LAN EMULATION OVER INFINIBAND FABRICS

Assignee: Intel Corporation

### **REMARKS**

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This responds to the Office Action mailed on April 5, 2004.

Claims 1, 10, and 19 are amended, no claims are canceled, and no claims are added. As a result, claims 1-22 are now pending in this application.

## Claim Objections

An objection was made to claim 1 based on informalities. The Office suggests that the meaning of "reside on an Ethernet network to the network protocol" at line 14 may be unclear. Claim 1 is amended to insert the word "according" to provide the requested clarification, such that the phrase beginning at line 12 now reads, "sending, by the IB LAN driver, the Ethernet MAC address onto the IB fabric to the at least one remote peer node, the at least one remote peer node appearing to reside on an Ethernet network according to the network protocol."

Although no objections were raised, the last phrase of claim 10 at line 16 and of claim 19 at line 15 are likewise amended to insert the word "according," to provide consistency and clarity throughout the claims.

The Office has also requested clarification of "at least one remote peer node" at line 6 of claim 1. Claim 1 is amended to insert the word "the" to provide the requested clarification, such that the phrase beginning at line 5 now reads, "generating an IEEE 802.3 Ethernet Media Access Control (MAC) address with one LID imbedded, the imbedded LID being for the at least one remote peer node, the IB LAN driver sending the Ethernet MAC address to an Address Resolution Protocol (ARP)..."

It should be noted that the amendments to claims 1, 10, and 19 are textual clarifications and are unrelated to patentability. The applicant wishes to express sincere appreciation for the Examiner's thorough review and notice of these informalities.

### §102 Rejection of the Claims

Claims 1-10 and 19-22 were rejected under 35 USC § 102(e) as being anticipated by Slemmer et al. (U.S. Patent 6,377,990, hereinafter "Slemmer") in view of Horikawa (U.S. Patent 6,389,021, hereinafter "Horikawa"). First, the Applicant does not admit that either Slemmer or

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Horikawa are prior art, and reserves the right to swear behind these references in the future. Second, because neither Slemmer nor Horikawa discloses the identical invention as claimed, the Applicant respectfully traverses this rejection.

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It is respectfully noted that anticipation under 35 USC § 102 requires that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegall Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Additional references may be used to show (a) public possession of prior art cited in the primary reference (In re Samour, 571 F.2d 559, 197 USPQ 1 (CCPA 1978) and In re Donohue, 766 F.2d 531, 226 USPO 619 (Fed. Cir. 1985)); (b) the meaning of a term used in the primary reference (In re Baxter Travenol Labs., 952 F.2d 38, 21 USPQ2nd 1281 (Fed. Cir. 1991)); or (c) inherency of a characteristic taught by the prior art reference (Continental Can Co. USA v. Monsanto Co., 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed Cir. 1991)). In the instant case, the Office makes no suggestion that either Slemmer or Horikawa is used to show public possession, the meaning of a term, or inherency. The Applicant respectfully asserts, therefor, that Slemmer and Horikawa cannot properly be combined as suggested by the instant Office Action. Applicability of the references to the Applicant's invention will thus be discussed individually.

Independent claim 1 includes "receiving, at an IB LAN driver at a first node on an IB [Infiniband] fabric..." as a claim element. Independent claim 10 includes "a channel adapter containing at least one port providing access to the IB fabric..." as a claim element. Independent claim 19 includes "receiving a port and a local identifier (LID) of a local node on an Infiniband (IB) fabric" as a claim element. The Office admits that Slemmer does not disclose an "infiniband fabric." Since a prior art reference must describe all elements of a claim, Slemmer is not an effective prior art reference with respect to the claims in the instant application. Other elements are also not disclosed by Slemmer.

The Office admits that Slemmer does not disclose Ethernet MAC addressing comprising a broadcast address, a multicast address, or a unicast address of claims 7-9 respectively. The Office admits that Slemmer does not disclose an Ethernet MAC address comprising 48 bits of claim 20. The Office admits that Slemmer does not disclose a network protocol comprising one of NetWare, Open Systems Interconnection (OSI), Transmission Control Protocol/Internet

Protocol (TCP/IP), DECnet, and AppleTalk of claim 5 and claim 22. Since Slemmer does not disclose these elements of the respective claims, Slemmer cannot be a prior art reference for any of the cited claims.

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Although Horikawa discloses apparatus and methods of communicating Ethernet over ATM, Infiniband is not ATM. The apparatus and methods of Horikawa do not involve Infiniband. Since all claims of the Applicant's invention are associated with "an Infiniband fabric," as noted above, Horikawa cannot be a valid prior art reference with respect to the claims.

Nor is it enough that the prior art reference discloses all the claimed elements in isolation. Rather, "[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, arranged as in the claim." Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added). "The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP § 2131 (emphasis added). Since neither Slemmer nor Horikawa teaches apparatus, systems, or methods associated with an Infiniband fabric, what is disclosed by Slemmer or Horikawa is not identical to the subject matter of the embodiments claimed, and therefore, the rejection of claims 1-10 and 19-22 under § 102 is improper. Reconsideration and allowance are respectfully requested.

# Allowable Subject Matter

Objections to claims 11-18 were raised due to dependency on a rejected base claim, but these claims were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicant notes with appreciation the conditional allowance of claims 11-18. However, since the cited references are ineffective for the reasons discussed, it is respectfully submitted that claims 11-18 are allowable in their current form.

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#### **CONCLUSION**

The applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone the Applicant's attorney, Mark Muller at (210) 308-5677, or the Applicant's below-named representative at (612) 373-6970 to facilitate prosecution of this application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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By his Representatives,

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 $\mathbf{R}\mathbf{v}$ 

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this \_\_\_\_\_ day of <u>July</u>, 2004.

\_\_\_KACIA LEE

Signature

Name